



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO.    |
|--|-------------|----------------------|-----------------------|---------------------|
| 10/595,382   | 04/13/2006  | Dieter Grimm         | IT20030040/72005-0157 | 8485                |
| 173  | 7590        | 06/23/2010           | EXAMINER              |                     |
| WHIRLPOOL PATENTS COMPANY - MD 0750<br>500 RENAISSANCE DRIVE - SUITE 102<br>ST. JOSEPH, MI 49085 |             |                      |                       | HECKERT, JASON MARK |
| ART UNIT   |             | PAPER NUMBER         |                       |                     |
| 1711   |             |                      |                       |                     |
| MAIL DATE  |             | DELIVERY MODE        |                       |                     |
| 06/23/2010   |             | PAPER                |                       |                     |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/595,382             | GRIMM ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | JASON HECKERT          | 1711                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 07 January 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 2-13 and 15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 2-13 and 15 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/7/10 has been entered.

### ***Response to Arguments***

2. Applicant's arguments, see pages 5-7, filed 1/7/10, with respect to the rejection(s) of claim(s) 2-13, 15 under 35 USC 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly discovered prior art.

3. The amended claim contains limitations drawn to spaced edges that converge upon a drain. The measuring instruments are contained within this guide area. It is known in the prior art to design a tub with spaced edges to receive heaters and other equipment. The examiner finds it obvious to locate sensor equipment within such an area, thus reading on the claimed invention.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1711

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2-6, 15-16 rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1096051 ('051) in view of Hisano (US 7,310,978). '051 teaches a washing appliance comprising a tank 4, a drum 5, a controller 12, an inclined drain surface provided on the tank directing the fluid toward drain tube 6 and at least two measuring instruments 8 and 9 connected to a controller. The measuring instruments provide information of the water collected in the inclined surface, specifically level and drainage time. These values read on "drainage behavior". The area is inside the tub. Drainage tube 6 have a different angle than the bottom of the tub. In regards to claim 5, two sensors are present at different locations and therefore different angles. The control of the outlet valve 3 can control drainage over time. '051 does not disclose spaced guide edges extending from the surface of the tank and converging to the drain. Hisano teaches a tub with a groove 24a located in water tub 24 that receives a heater, one type of electrical equipment. The groove is inclined and converges towards the drain 27. One of ordinary skill would be entirely capable of located the sensing equipment of '051, which is disclosed as being located along the bottom of the tub, in a groove that extends from the surface of the tank as taught by Hisano, as both elements are established in the prior art. It would have been obvious at the time of invention to modify '051 and include the sensing equipment in a groove, as taught by Hisano, in order to obtain measurement at the bottom of the drum in the vicinity of the drain.

6. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over '051 in view of Hisano and further in view of EP 1156318 ('318). '051 does not teach measuring drops of water. '318 discloses a measurement device to determining the properties of a fluid that comprises two inclined surfaces 7a and 7b. Drops can be counted (paragraph 22). The device measures viscosity. It would have been obvious at the time of invention to modify '051 in view of Hisano, as stated above, and include the device of '318, in order to measure the viscosity of the fluid.

7. Claim 7, 9, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over '051 in view of Hisano in view of Severns. '051 does not disclose optical, conductive, or capacitive sensors. Severns teaches that level sensor 44 can be conductive, capacitive, or optical and that they can be located along the tank wall, just as in '051. Thus, it would have been obvious at the time of invention to modify '051 in view of Hisano, as stated above, and further include optical, capacitive, conductive sensors, or combinations thereof, in order to detect fluid level.

8. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over '051 in view of Hisano in view of Severns and in further view of DE19821148 ('148). '051 and Severns disclose the use of level sensors and obviate capacitive, conductive, and optical sensors but do not disclose much in the way of location, other than the bottom or side of the apparatus. '148 teaches locating level sensors along the bottom of the apparatus, the inclined drain tube, the sides of the tub, and in the vicinity of the pump (see abstract). That is, '148 discloses locating the level sensors in various areas that read on "bottom portion" or "collection vessel". The combination of the above

references possesses the same structure, and is therefore believed to be capable of operating in a similar manner. It would have been obvious at the time of invention to locate the level sensors in different areas of the machine, as taught by '148, in order to detect the level and drainage time.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HECKERT whose telephone number is (571)272-2702. The examiner can normally be reached on Mon. to Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/  
Supervisory Patent Examiner, Art  
Unit 1711

Application/Control Number: 10/595,382  
Art Unit: 1711

Page 6

JMH